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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,537	09/10/2003	Kiyohiko Yamazaki	KAT 253	1951

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RABIN & Berdo, PC
1101 14TH STREET, NW
SUITE 500
WASHINGTON, DC 20005

EXAMINER

EJAZ, NAHEED

ART UNIT	PAPER NUMBER
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2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/658,537

Applicant(s)

YAMAZAKI, KIYOHICO

Examiner

Naheed Ejaz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,7,8,11,12,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,8,11,12,16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4, 7, 8, 11, 12, 16, 17 & 19 filed on 10/24/2006 have been considered but are moot in view of the new ground(s) of rejection.

Response to Amendment

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hachisuka et al. (5,598,430) (hereinafter, Hachisuka) in view of Weiss (5,151,922) and further in view of Cox (4,513,412).

4. Refer to claim 1, Hachisuka teaches, demodulation of the signal (see col.1, lines 41-47), 'a mode selector (see figure 1, element 112) for selecting either of a reproduction mode of reproducing the digital signals (see figure 1, element 108, col.4, lines 14-16) and an evaluation mode of evaluating the digital signals' (see figure 1, elements 107, 109, & 110, col.4, lines 14-16) (it should be noted that in figure 1 switch 112 (claimed mode selector) is selecting between digital signal detecting circuit 108 (claimed 'reproduction mode') or the output from the digital signal detecting circuit 107

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(claimed 'evaluation mode') according to the result of the determination by the logic discriminating circuit 111 (col.4, lines 38-48) which gets inputted by the noise detection circuit 109 and RSSI detecting circuit 110 (claimed error generator) since as it is disclosed in the specification that reproduction mode is the mode which outputs the inputted digital value directly to ADPCM CODEC without going through the error detection stage of the circuit while evaluation mode is responsible to output the digital signal through error generator to error detector (Specification, page # 8, paragraph # 0026 & page # 9, paragraph # 0027). Hachisuka is selecting one of the circuits (figure 1, elements 108 and 107) through (figure 1, element 112) and the process of detecting noise and strength of the received signal is included when element 112 selects circuit 107 (as described above) and therefore it is considered to be equivalent to applicant's limitations of having two modes with error generator included. Furthermore, Specification does not clarify the advantage of inverting the level of the digital signal for the evaluation mode).

Hachisuka does not teach the inverting level of digital signal.

Weiss discloses, a demodulated signal (see figure 1, 'DEMODULATED SIGNAL') and inverting the digital signal (see figure 1, element 64, col.3, lines 21-28).

It would have been obvious to one ordinary skill in the art to implement the teachings of Hachisuka into Weiss in order to disable the speaker while data signal is present (selecting one of the mode depending on what type of signal is present) as taught by Weiss (see col.3, lines 21-28).

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Hachisuka and Weiss do not teach pair of single pole, double throw switches that are connected to one another.

Cox discloses a pair of single pole double throw buffer selection switches (figure 5, elements 91 & 92) (claimed 'a pair of single pole, double throw switches'), these switches are controlled from controller 13 via a control signal on line "u" (col.7, lines 3-5) (claimed 'both switches being responsive to a common selection signal').

It would have been obvious to one of ordinary skill in the art, at the time of invention was made, to implement the teachings of Cox into Hachisuka and Weiss in order to respond to the mode selected data through switches 91 & 92 (figure 5) by selecting buffer 1 or 2 (figure 5, element 28) and thus transmit the data to the intended user (col.7, lines 14-32) as taught by Cox and thus enhance system reliability.

(Note: it is also noted that Applicant admitted (Remarks, *dated*: 10/24/2006) that single pole double throw switches are well known in the art (Remarks, page # 5, lines 13-17) and have middle position ('off' or 'on') in order to control the switch circuitry (Remarks, pages 6 of 9, lines 24, pages 7 of 9, lines 1-4) according to one's design choice and therefore can be incorporated with Hachisuka and Weiss references above to control the mode selection accordingly).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hachisuka et al. (5,598,430) in views of Weiss (5,151,922) & Cox (4,513,412), as applied to claim 1 above, and further in view of Shinozaki et al. (6,687,512) (hereinafter, Shinozaki).

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6. Refer to claim 2, Hachisuka, Weiss & Cox teach all the limitations in the previous claim on which claim 2 depends but they fail to disclose two selectors.

Shinozaki discloses, 'a first selector switch' (figure 6, elements 164 & 170, col.5, lines 48-52, col.6, lines 4-18), and 'a second selector switch' (figure 6, elements 168 & 172, col.5, lines 48-52, col.6, lines 4-18), 'said first and second selector switches synchronously selecting a same mode side' (col.6, lines 15-18).

It would have been obvious to one ordinary skill in the art, at the time of invention was made, to implement the teachings of Shinozaki into Hachisuka, Weiss & Cox in order to select a destination of digital signals and a source as to be able to switch to different modes based on the types of the signals inputted as taught by Shinozaki (col.2, lines 15-19).

7. Claims 3, 4, 7, 8, 11, 12, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hachisuka et al. (5,598,430) in views of Weiss (5,151,922), Cox (4,513,412) & Shinozaki et al. (6,687,512), as applied to claims 1 & 2 above, and further in view of Hori et al. (US 2003/0117926) (hereinafter, Hori).

8. Refer to claim 3, Hachisuka, Weiss, Cox & Shinozaki teach all the limitations in the previous claims on which claim 3 depends but they fail to disclose 'a pulse outputting circuit'.

Hori discloses, 'a pulse outputting circuit for outputting pulse signals at the predetermined timing' (see figure 2, element 110, page # 3, paragraph # 0045 and 0047, and page # 4, paragraph # 0054) (Note: element 103 supplies pulse to element 110); and an inverter for inverting the level of the digital signals responsive to a

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transmission of the pulse signals (see figure 3, element 601, page # 3, paragraph # 0045 and 0046).

It would have been obvious to one of ordinary skill in the art, at the time of invention was made, to implement the teaching of Hori into Hachisuka, Weiss, Cox & Shinozaki as to detect and set the value of an error signal as taught by Hori (see page # 5, paragraph # 0073).

9. - Refer to claim 4, Hachisuka, Weiss, Cox & Shinozaki teach all the limitations in the previous claims on which claim 4 depends but they fail to disclose 'a preset value holding circuit'.

Hori discloses, 'said error generator (see figure 2, element 107, page # 4, paragraph # 0052) comprises a preset value holding circuit (see figure 2, element 108, page # 4, col.1, paragraph # 0054) which has a preset value defining a transmission timing of the pulse signals set from outside said apparatus to hold the preset value to supply the preset value to said pulse outputting circuit (see figure 2, element 110, figure 3) and (page # 3, paragraph # 0046 and 0047).

It would have been obvious to one of ordinary skill in the art, at the time of invention was made, to implement the teaching of Hori into Hachisuka, Weiss, Cox & Shinozaki in order to divide and synchronize and external clock or pulse as taught by Hori (see page # 1, col.2, paragraph # 0013, lines 45-49).

10. Refer to claim 7, Hachisuka, Weiss, Cox & Shinozaki teach all the limitations in the previous claims on which claim 3 depends but they fail to disclose an error detector explicitly.

Hori discloses, 'an error detector (see figure 2, element 109A or 109B) interconnected to said mode selector for detecting an error contained in the digital signals (see figure 2, element 102); said error detector supplying said pulse outputting circuit (see figure 2, element 110) with an output timing defining a field of the digital signal in which check data for received data are held' (see page # 3, col.2, paragraph # 0047).

It would have been obvious to one of ordinary skill in the art, at the time of invention was made, to implement the teaching of Hori into Hachisuka, Weiss, Cox & Shinozaki in order to have signals in synchronization with pulse generator as taught by Hori (see page # 3, col.2, paragraph # 0049, lines 27-30).

11. Claim 8 is rejected under the same rational as claim 7 above.

12. Refer to claim 11, Hachisuka, Weiss, Cox & Shinozaki teach all the limitations in the previous claims on which claim 11 depends but they fail to disclose 'a sync pattern detector'.

Hori discloses, 'a sync pattern detector interconnected to said mode selector for detecting a sync pattern contained in the digital signals (see figure 2, elements 102 and 105); said sync pattern detector supplying said pulse outputting circuit with an output timing defining a field of received data which follows the sync pattern and holds check data' (see figure 2, elements 102, 105, and 106, page # 3, col.2, paragraph # 0050 and page # 5, col.2, paragraph # 0070).

It would have been obvious to one of ordinary skill in the art, at the time of invention was made, to implement the teaching of Hori into Hachisuka, Weiss, Cox &

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Shinozaki as to detect the fix pattern and output a sync pattern detection as taught by Hori (see page # 2, col.1, paragraph # 0018, lines 17-20).

13. Claim 12 is rejected under the same rational as claim 11.

14. Refer to claim 16, Hachisuka, Weiss, Cox & Shinozaki teach all the limitations in the previous claims on which claim 16 depends but they fail to disclose an error detector and a time selector explicitly.

Hori discloses, 'an error detector for detecting an error contained in the digital signals (see figure 2, elements 109A, and 109B combined, page # 4, paragraph # 0053 and 0058); and a timing selector for selecting an output timing supplied from either of said error detector and said sync pattern detector' (see figure 2, element 106) and (page # 3, paragraph # 0049 and page # 4, paragraph # 0052).

It would have been obvious to one of ordinary skill in the art, at the time of invention was made, to implement the teaching of Hori into Hachisuka, Weiss, Cox & Shinozaki in order for a time selector to check if the inputted signal by error detector represents the presence or absence of error signal as taught by Hori (see page # 4, col.1, paragraph # 0052, lines 9-12) and if the inputted sync detection signal represents the absence or presence of the detection to timing generator as taught by Hori (see page # 3, paragraph # 0049, col.2, lines 27-46 and paragraph # 0050).

15. Claim 17 is rejected under the same rational as claim 16 above.

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Conclusion

16. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

- Tamaru et al. (3,715,469) disclose color television receiver (see figures 2 & 9, columns 9-10).
- Schley-May (4,926,464) teaches telephone communication apparatus and method having automatic selection of receiving mode (see figure 1, columns 4-6).

Contact Information

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naheed Ejaz whose telephone number is 571-272-5947. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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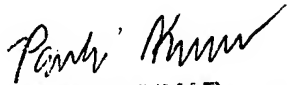
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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Naheed Ejaz
Examiner
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N.E.
12/27/2006


PANKAJ KUMAR
PRIMARY PATENT EXAMINER